

Big data and prevention of bladder cancer

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Valorisation Addendum



Bladder cancer, the 4th most common cancer in men and 17th most common in women [1, 2], represents a major health problem. It is therefore, of utmost importance to establish risk factors associated with the development of this disease.

The USA National Cancer Institute has stated that one-third of all bladder cancer deaths could have been prevented by dietary modifications. A 30 % reduction of bladder cancer incidence in the USA would equal a reduction of 1.2 billion US dollars of total medical care expenditures per year. This thesis provides clues to the dietary determinants of bladder cancer, thereby providing data about the diet-bladder cancer relationship, that can directly be transformed Public Health Nutrition into the practise of prevention. Even though the effect sizes of the food items investigated in this thesis are small, they might have a major impact on human health and related health care costs.

A major challenge remains in translating nutritional findings into daily practice. Although in recent years dietary guidance has become increasingly science based, there seems to be an ever-widening gap between the scientific evidence and consumer behaviour. Consumers are overwhelmed with dietary recommendations they receive from television, popular press, or by browsing internet, making it hard to make the accurate nutritional decisions. It is the task for scientific experts and government to fill this gap and provide individuals with accurate evidence-based nutritional recommendations. For this, close collaboration and knowledge exchange between scientists, health professionals like dietitians and nutritionists, health care organization and governments are needed.

In order to meet this need, results of the current thesis have been not only been published in scientific journals, but have also been presented to the academic community during well-known scientific conferences [*i.e.* yearly Dutch Epidemiological Society (WEON)] and disseminated to the public by an Elsevier (with the endorsement of the WCRF) published book entitled “Diet and Fighting Bladder Cancer”. This book specifically aims to help (layman) individuals to make accurate nutritional decisions to fight bladder cancer by translating all current scientific findings (including ours) into practical and example recipes. In addition, a lay version of our results will be published on wikipedia, e-how/health and the project’s own website (www.dietandbladdercancer.org).

References

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